Docket No.: MWS-077RCE

Application No.: 09/911,819

REMARKS

Claims 1-56 are pending in this application. Claims 1-56 have been rejected. Claims 1, 5 and 29 have been amended. Claims 4 and 33 have been cancelled. No new matter has been added. Applicants submit that claims are patentable and in condition for allowance. Applicants respectfully request reconsideration of the outstanding rejections and allowance of all pending claims in view of the reasons set forth below.

Examiner Interview

Applicants' representative thanks the Examiner for the courtesies extended during the telephone interview conducted on July 5, 2006. During the interview the Examiner indicated that he believed claim 1 should be amended to include subject matter from claim 49 as well as features from other claims and/or features discussed in the specification. Applicants do not believe that such an amendment is necessary. Applicants' representative respectfully declined to make the requested changes to claim 1.

Claim Rejections

Claim 1-3, 6-10, 29-32, and 34-38 have been rejected under 35 U.S.C. § 101.

Claims 1-7, 11-13, 17, 20, 29-35, 39, 40-41, 45 and 48 have been rejected under 35 U.S.C. § 102(b) as being anticipated by the Shannon reference.

Claims 8-10, 14-16, 18-19, 36-38, 42-44 and 46-47 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over the Shannon reference in view of the Stroustrup reference.

Claims 21-28 and 49-56 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over the Elmroth reference in view of the Research Systems reference, further in view of the Shannon reference.

Claim Rejections – 35 U.S.C. § 101

Claims 1-3, 6-10, 29-32, and 34-38 are rejected under 35 U.S.C. § 101 because the claimed invention is allegedly directed to non-statutory subject matter (Office Action, page 2, § 3). Specifically, the Examiner states "one skill [sic] in the art would not be apprised on [sic]

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existence of (i) a functional and concrete step acting upon the elements recited, the definition and the description information; (ii) a targeted, useful and tangible result being the consequence of an action using/operated upon, say, the *description information* thus claimed." Applicants respectfully traverse this rejection.

Claim 1

Amended claim 1 reads as follows:

"In a computing device, a method comprising:

providing a definition of a function associated with a first language;

creating description information about the function from the definition of a function associated with a first language; and

translating a call to the function in the first language into a call to a corresponding function in a second language using the description information, without processing the definition of the function."

Applicants respectfully submit that this rejection cannot be applied to claim 1 as amended. Amended claim 1 recites a tangible and useful result. Among other things, claim 1 as amended recites the step of "translating a call to the function in the first language into a call to a corresponding function in a second language using the description information, without processing the definition of the function." Such translating has practical utility and further has a tangible result.

In view of the above reasons, Applicants respectfully submit that the subject matter of claim 1 fulfills the requirements of 35 U.S.C. § 101 and kindly request that the rejection to claim 1 under 35 U.S.C. § 101 be withdrawn.

Claims 2-3 and 6-10

Claims 2-3 and 6-10 depend from claim 1 and meet the requirements of 35 U.S.C. § 101 for at least the reasons presented above with respect to claim 1. Applicants kindly request that the rejection to claims 2-3 and 6-10 under 35 U.S.C. § 101 be withdrawn.

Claim 29

Amended claim 29 recites:

"A computer program product, tangibly-stored on a computer-readable medium, for creating a data file, the product comprising instructions operable to cause a programmable processor to: obtain a definition of a function associated with a first language; create description information about the function from the definition of the function associated with a first language; and translate a call to the function in the first language into a call to a corresponding function in a second language using the description information, without processing the definition of the function."

Claim 29 is a medium claim and is directed to a manufacture, therefore to a statutory subject matter. The Examiner states that "claim 29 amounts to a non-practical application because it fails to yield a concrete, useful and tangible result as required by the above-mentioned Practical Application Test." (See Office Action, page 3, last line - page 4 lines 1-2). Claim 29 recites a useful, concrete and tangible result, such as to "translate a call to the function in the first language into a call to a corresponding function in a second language."

In view of the above reasons, Applicants respectfully submit that the subject matter of claim 29 fulfills the requirements of 35 U.S.C. § 101 and kindly request that the rejection to claim 29 under 35 U.S.C. § 101 be withdrawn.

Claims 30-32 and 34-38

Claims 30-32 and 34-38 depend from claim 29 and meet the requirements of 35 U.S.C. § 101 for at least the reasons presented above with respect to claim 29. Applicants kindly request that the rejection to claims 30-32 and 34-38 under 35 U.S.C. § 101 be withdrawn.

Claim Rejections – 35 U.S.C. § 102

Claims 1-7, 11-13, 17, 20, 29-35, 39, 40-41, 45 and 48 are rejected under 35 U.S.C. § 102(b) as being anticipated by Shannon et al., "Mapping the Interface Description Language

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Type Model in C", November 1989, IEEE Transactions on Software Engineering, Vol. 15. No. 11 (hereinafter Shannon). Applicants respectfully traverse the rejection.

<u>Claim 1</u>

Claim 1 recites "<u>translating</u> a call to the function in the first language into a call to a corresponding function in a second language <u>using the description information</u>, without processing the definition of the function." Shannon does not disclose this feature.

Shannon discusses how to map the IDL structure specifications into data structure declarations of a particular target language, the C programming language, (page 1333, right column, § 1). IDL is a notation for describing the characteristics of data structures passed among collections of cooperating processes in a programming environment, (page 1333, abstract). A data structure is a way of storing data in a computer so that it can be used efficiently. As opposed to data structures, functions perform a specific task, an operation on their arguments. Shannon creates a mapping between the IDL structure specifications and C data structure declations. Shannon recites " a new C type named Boolean is provided to represent the IDL type Boolean. The C type Boolean is a typedef name for the C type char. The IDL data type Integer is mapped to the C type int.", (page 1336, rigt column, § 2). Shannon does not disclose "translating a call to the function in the fist language into a call to a corresponding function in a second language," as required by claim 1.

As such, Shannon does not disclose the features of amended claim 1 as Shannon fails to disclose each and every element of claim 1. Accordingly, Applicants respectfully request the Examiner to reconsider and withdraw the rejection of claim 1 under U.S.C. § 102.

<u>Claims 2-7</u>

Claims 2-7 depend on claim 1 and as such incorporate each and every element of claim 1. Therefore claims 2-7 are allowable for the same reasons discussed above for claim 1. In view of the above comments, Applicants kindly request the Examiner to reconsider and withdraw the rejection of claims 2-7 under U.S.C. § 102.

Claim 11

Shannon fails to disclose "a file of description items, each item including <u>description information</u> about a function associated with a first language" as required by claim 11.

Applicants respectfully submit that the description information disclosed in these claims is not the same as the IDL node declarations discussed in Shannon. The language identified by the Examiner as disclosing this feature refers to the IDL node declarations and the structures specified in IDL, (Office Action, page 6, last paragraph). Shannon does not disclose a file of description items, each item including <u>description information</u> about a function as recited in claim 11. As argued above, the description information of the present application is different than IDL basic types of data structures.

Furthermore, Shannon discloses IDL structure specifications and C language only. Specifically, the mapping disclosed in Shannon is directed to a specific target language, namely the C language. Claim 11 recites "the description information enables translation of a call to the function in a first language into a call to a corresponding function in a <u>second language</u>." The text of this claim does not include "the C language."

As such, Shannon does not anticipate claim 11 as Shannon fails to disclose each and every element of claim 11. Accordingly, Applicants respectfully request the Examiner to reconsider and withdraw the rejection of claim 11 under U.S.C. § 102(b).

Claims 12-13, 17 and 20

Claims 12-13, 17 and 20 depend on claim 11 and as such incorporate each and every element of claim 11. Claims 12-13, 17 and 20 are therefore allowable for the same reasons as claim 11. In view of the above reasons presented in conjunction with independent claim 11, Applicants kindly request that the Examiner reconsider and withdraw the rejection of claims 12-13, 17 and 20 under U.S.C. § 102(b).

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Claims 29-35

Claims 30-35 depend on claim 29 and as such incorporate each and every element of claim 29. Claim 29 recites "create description information about the function from the definition of the function associated with a first language; and translate a call to the function in the first language into a call to a corresponding function in a second language using the description information." In light of reasons presented with respect to claim 1, above, claims 29-35 include patentable features. Applicants respectfully submit that Shannon does not disclose the features of claims 29-35. Therefore, Shannon does not support a valid 35 U.S.C. §102(b) rejection of claims 29-35. Accordingly, Applicants kindly request that the Examiner reconsider and withdraw the rejection of claims 29-35 under U.S.C. § 102(b).

Claims 39-41, 45 and 48

Claims 40-41, 45 and 48 depend on claim 39 and as such incorporate each and every element of claim 39. Claim 39 recites "provide a file of description items, each item including description information about a function associated with a first language, and use the file of description items to translate a first program file into a second program file." In light of above arguments presented with respect to claim 1, claims 39-41, 45 and 48 include patentable features. Applicants respectfully submit that Shannon does not disclose all the features of claims 39-41, 45 and 48. Therefore, Shannon does not support a valid 35 U.S.C. §102(b) rejection of claims 39-41, 45 and 48. Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claims 39-41, 45 and 48 under U.S.C. § 102(b).

Claim Rejections – 35 U.S.C. § 103

Claims 8-10, 14-16, 18-19, 36-38, 42-44 and 46-47 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Shannon et al., "Mapping the Interface Description Language Type Model in C," November 1989, IEEE Transactions on Software Engineering, Vol. 15, No. 11, in view of Bjarne Stroustrup, "the C++ Programming Language", 2nd Edition, copyright 1991 (hereinafter Stroustrup). Applicants respectfully traverse this rejection.

Claims 8-10

Claims 8-10 depend from independent claim 1 and as such incorporate each and every element of claim 1. The combination of Shannon and Stroustrup do not teach or suggest "creating description information about the function from the definition of a function associated with a first language," as required by claim 1, and thus, claims 8-10.

For example, Shannon is silent with respect to "creating description information about the function from the definition of a function associated with a first language." Stroustrup does not cure the shortcomings of Shannon with respect to the elements of claims 8-10. For example, Stroustrup describes the programming language C++. The language identified by the Examiner refers to the command line arguments and the values of arguments in C++, (Stroustrup, page 87, section 3.1.6). This is not the same as "the description information" recited in claims 8-10.

Stroustrup describes how to present an expression as a command line argument, (Stroustrup page 87, section 3.1.6). Stroustrup recites "main () is given two arguments specifying the number of arguments, usually called argc, and an array of arguments, usually called argv. The arguments are character strings, so the type of argv is char*[argc+1]." The command line arguments corresponding to an expression are not the "description information about the function from the definition of a function associated with a first language", as required by claim 1, and thus, claims 8-10. The combination of Shannon and Stroustrup does not cure that each reference fails to teach or suggest each and every element of claim 1. Specifically, Shannon and Stroup fail to teach or suggest description information about a function associated with a first language.

As such, Claims 8-10 are patentable over Shannon in view of Stroustrup as the combination of Shannon and Stroustrup fail to teach or suggest each and every element of claims 8-10. Accordingly, Applicants respectfully request the Examiner to reconsider and withdraw the rejection of claims 8-10 under U.S.C. § 103(a).

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Claims 14-16 and 18-19

Claims 14-16 and 18-19 depend on independent claim 11 and as such incorporate each and every element of claim 11. As mentioned above, Shannon does not teach or suggest "a file of description items, each item including <u>description information</u> about a function associated with a first language," as required by claim 11. Shannon fails to teach or suggest each and every element of claim 11. Based on above arguments, the combination of Shannon and Stroustrup does not disclose or suggest each and every element of claim 11. Specifically, Shannon and Stroup fail to disclose or suggest <u>description information</u> about a function associated with a first language.

As such, Claims 14-16 and 18-19 are patentable over Shannon in view of Stroustrup as the combination of Shannon and Stroustrup fail to teach or suggest each and every element of claims 14-16 and 18-19. Accordingly, Applicants respectfully request the Examiner to reconsider and withdraw the rejection of claims 14-16 and 18-19 under U.S.C. § 103(a).

Claims 36-38

Claims 36-38 depend from independent claim 29 and as such incorporate each and every element of claim 29. The combination of Shannon and Stroustrup do not teach or suggest "create <u>description information</u> about the function from the definition of the function associated with a first language; and <u>translate</u> a call to the function in the first language into a call to a corresponding function in a second language using <u>the description information</u>, without processing the definition of the function," as required by claim 29, and thus, claims 36-38. Applicants respectfully submit that Shannon, in view of Stroustrup, does <u>not</u> disclose all the features of claims 36-38. Accordingly, Applicants kindly request the Examiner to reconsider and withdraw the rejection of claims 36-38 under U.S.C. § 103(a).

Claims 42-44 and 46-47

Claims 42-44 and 46-47 depend from claim 39 and as such incorporate each and every element of claim 39. The combination of Shannon and Stroustrup do not teach or suggest "provide a file of description items, each item including <u>description information</u> about a function

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associated with a first language, and <u>use the file of description items to translate</u> a first program file into a second program file," as required by claim 39, and thus claims 42-44 and 46-47. Applicants respectfully submit that Shannon, in view of Stroustrup, does <u>not</u> disclose all the features of claims 42-44 and 46-47. Accordingly, Applicants kindly request that the Examiner reconsider and withdraw the rejection of claims 42-44 and 46-47 under U.S.C. § 103(a).

Claims 21-28 and 49-56 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Elmroth et al., "A Web Computing Environment for the SLICOT Library'" December 2000, Brite-Euram III, Networks Programme NICONET (hereinafter Elmroth), in view of Research Systems, "IDL", copyright 1994, further in view of Shannon et al., "Mapping the Interface Description Language Type Model in C", November 1989, IEEE Transactions on Software Engineering. Applicants respectfully traverse this rejection.

<u>Claim 21</u>

Claim 21 recites "the description file including <u>description information</u> about each function in the library file." Elmroth, in view of Research Systems, further in view of Shannon does not teach or suggest this limitation.

Elmroth discloses a prototype computing environment for computations related to the design and analysis of control systems using Subroutine Library In Systems and Control Theory (SLICOT) software library. The language identified by the Examiner refers to the possibility to download matrices in Fortran data format, Latex format, Matlab and Scilab binary format on the local computer and to save complete sessions, (Elmroth, page 6, § 1). The ability to download a file in different formats is not the same as "creating a function library and description file from the library file" "wherein the description information enables translation of a call to the function in the first language into a call to a corresponding function the second language," as required by claim 21.

The Examiner states that Research Systems discloses definition language, IDL and mapping various application functions to a fourth-grade generation programming language alike C, and using IDL file (Office Action, page 12, line 4). Applicants have previously argued (e.g., the Response to Office Action mailed March 25, 2005) and continue to argue that the IDL

language of Research Systems is no the same IDL of an Interface Description Language as referred in Shannon. The IDL of Research Systems is an advanced software for data analysis, visualization and application development. Research Systems use IDL as an abbreviation for Interactive Data Language. Shannon uses IDL as an abbreviation for Interface Description Language. Thus, the Examiner's reference to Research Systems IDL is not relevant to the disclosure of Shannon and further is not relevant to the elements of claim 21.

As such, Applicants respectfully submit that claim 21 is patentable over Elmroth in view of Research Systems in further view of Shannon as the combination of Elmroth, Research Systems and Shannon fail to disclose or suggest each and every element of claim 21. Accordingly, Applicants respectfully request the Examiner to reconsider and withdraw the rejection of claim 21 under U.S.C. § 103(a).

Claims 22-28

Claims 22-28 depend from independent claim 21 and as such incorporate each and every element of claim 21. Claims 22-28 are therefore allowable for the same reasons as claim 21. In view of the above comments, Applicants kindly request the Examiner to reconsider and withdraw the rejection of claims 22-28 under U.S.C. § 103(a).

Claims 49-56

Claims 50-56 depend on claim 49 and as such incorporate each and every element of claim 49. The combination of Elmroth, Research Systems and Shannon do not teach or suggest "the description file including description information about each function in the library file," as required by claim 49, and thus claims 50-56. Applicants respectfully submit that Elmroth in view of Research Systems in further view of Shannon also fails to detract from the patentability of claims 49-56. Accordingly, Applicants respectfully request the Examiner to reconsider and withdraw the rejection of claims 49-56 under U.S.C. § 103(a).

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CONCLUSION

In view of the above comments, Applicants believe the pending application is in condition for allowance and urge the Examiner to pass the claims to allowance. Should the Examiner feel that a teleconference would expedite the prosecution of this application, the Examiner is urged to contact the Applicants attorney at (617) 227-7400.

Please charge any shortage or credit any overpayment of fees to our Deposit Account No. 12-0080, under Order No. MWS-077RCE. In the event that a petition for an extension of time is required to be submitted herewith, and the requisite petition does not accompany this response, the undersigned hereby petitions under 37 C.F.R. § 1.136(a) for an extension of time for as many months as are required to render this submission timely. Any fee due is authorized to be charged to the aforementioned Deposit Account.

In view of the above remarks, Applicants believe the pending application is in condition for allowance.

Dated: November 17, 2006

Respectfully submitted,

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